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Disciplina 515

Soggetti Dynamics

Ergodic theory

Partial differential equations Computer mathematics

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Associative rings Rings (Algebra) Group theory

Dynamical Systems and Ergodic Theory

Partial Differential Equations

Computational Mathematics and Numerical Analysis

Associative Rings and Algebras Group Theory and Generalizations

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Nota di contenuto On the Control of the Navier-Stokes Equations and Related Systems --

Asymptotic Stability in Some Generic Classes of Three-Dimensional Discontinuous Dynamical Systems -- Regularisation in Ejection-Collision Orbits of the RTBP -- On Local Algebras of Maximal Algebras of Jordan Quotients -- On the Numerical Behavior of a Chemotaxis Model with Linear Production Term -- The Thin-Sandwich Problem in General Relativity -- Parametric Solutions to a Static Fourth-Order Euler-Bernoulli Beam Equation in Terms of Lamé Functions -- On Large

Orbits of Actions of Finite Soluble Groups: Applications -- Poisson

Algebras and Graphs -- Graphs with Weight of Fold Gauss Maps -- A Note on Spacelike Hypersurfaces and Timelike Conformal Vectors -- Naturally Graded Quasi-Filiform Associative Algebras -- Spacelike Hypersurfaces in Conformally Stationary Spacetimes -- Geodesic Completeness and the Quasi-Einstein Equation for Locally Homogeneous Affine Surfaces.

Sommario/riassunto

This volume comprises high-quality works in pure and applied mathematics from the mathematical communities in Spain and Brazil. A wide range of subjects are covered, ranging from abstract algebra, including Lie algebras, commutative semigroups, and differential geometry, to optimization and control in real world problems such as fluid mechanics, the numerical simulation of cancer PDE models, and the stability of certain dynamical systems. The book is based on contributions presented at the Second Joint Meeting Spain-Brazil in Mathematics, held in Cádiz in December 2018, which brought together more than 330 delegates from around the world. All works were subjected to a blind peer review process. The book offers an excellent summary of the recent activity of Spanish and Brazilian research groups and will be of interest to researchers, PhD students, and graduate scholars seeking up-to-date knowledge on these pure and applied mathematics subjects.